

CCSP Annual Report to Congress: *Our Changing Planet*



Since 1989, the annual report, *Our Changing Planet*, has been submitted to Congress by the Federal agencies charged with coordinated research on global environmental change. The report is required under the provisions of the *Global Change Research Act of 1990*, and summarizes recent achievements, near-term plans, and progress in implementing long-term goals. It also provides an overview of recent and near-term expenditures and of requested funding. The report is issued by the U.S. Climate Change Science Program (CCSP), which incorporates the U.S. Global Change Research Program (USGCRP) and the President's Climate Change Research Initiative (CCRI). The Administration has charged the CCSP with responsibility for compliance with the 1990 Act—including its provisions for annual reporting of findings and near-term program plans.

STRUCTURE AND PRODUCTION OF THE REPORT

Production of *Our Changing Planet* commonly extends over a year, involves the 13 Federal departments and agencies that constitute CCSP, and is coordinated by the CCSP Office (CCSPO). The organization of the report has varied over its history. Since the 2002 edition, the report has included the following sections:

- Introduction and overview.
- Highlights of recent research and plans for the next fiscal year, organized by interdisciplinary research elements and cross-cutting activities that encompass a wide range of interconnected issues of climate and global change:
 - Atmospheric composition
 - Climate variability and change (including climate modeling)
 - Global water cycle
 - Land-use and land-cover change
 - Global carbon cycle
 - Ecosystems
 - Decision-support resources and related research on human contributions and responses
 - Observing and monitoring the climate system (including data management and information)
 - Communications
 - International research and cooperation.



Interagency working groups, each focused on a different element or activity, prepare and submit text for this portion of the report. The process of preparing the draft chapters serves as a mechanism for evaluating past progress towards meeting program objectives and coordinating plans for future research.

- Appendix material including:
 - Agency-by-agency summaries, prepared and submitted by the individual departments and agencies that participate in the CCSP



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Our Changing Planet: The U.S. Climate Change Science Program for FY 2006.
This annual report to Congress has been produced since 1989.



LEGAL REQUIREMENTS ESTABLISHED IN 1990

Our Changing Planet is a report mandated by Section 107 of the 1990 Global Change Research Act (PL 101-606):

- (a) GENERAL—Each year at the time of submission to the Congress of the President's budget, the Chairman of the Council shall submit to the Congress a report on the activities conducted by the Committee pursuant to this title, including:
 1. A summary of the achievements of the Program during the period covered by the report and of priorities for future global change research
 2. An analysis of the progress made toward achieving the goals of the Plan
 3. Expenditures required by each agency or department for carrying out its portion of the Program, including:
 - (A) The amounts spent during the fiscal year most recently ended
 - (B) The amounts expected to be spent during the current fiscal year
 - (C) The amounts requested for the fiscal year for which the budget is being submitted.
- (b) RECOMMENDATIONS—The report required by subsection (b) shall include recommendations by the President concerning:
 1. Changes in agency or department roles needed to improve implementation of the Plan
 2. Additional legislation which may be required to achieve the purposes of this title.

The full text of the 1990 Global Change Research Act can be found at <www.gcric.org/gcact1990.html>.

- Budget tables, produced through consultations between CCSP departments and agencies, and the White House's Office of Management and Budget (OMB).

Once the individual components of the report are assembled into a single report, edited, and illustrated, CCSPSO submits the report for review by the departments, agencies, and offices that constitute the CCSP, and for review by the CCSP's interagency working groups. Upon receipt of review comments from these entities, CCPSO revises *Our Changing Planet*.

Finally, as is the case with any formal report from the Executive branch to the Congress, *Our Changing Planet* is submitted to OMB for a standard interagency pre-release clearance process (as per OMB Circular No. A-19, Legislative Coordination and Clearance, <www.whitehouse.gov/omb/circulars/a019/a019.html>). This process includes OMB's submission of the report to each agency's legislative liaison officer. Once the report receives final OMB clearance, the report is prepared for publication. Shortly before public release, the report is sent to Capitol Hill for distribution to Members of Congress and their staff.

RELATIONSHIP TO THE CCSP STRATEGIC PLAN

A principal function of *Our Changing Planet* is to report on progress in implementing the CCSP's strategic plan and to recommend any changes in agency or department roles required to implement the plan. The current *Strategic Plan for the U.S. Climate Change Science Program* was published in 2003. It focuses on five overall CCSP goals and a set of interdisciplinary and interagency research elements focusing on crucial components and interactions within the Earth system. In addition, the plan details plans for cross-cutting issues of modeling, observations and data management, communications, international cooperation, and program management. A similar structure is mirrored in each *Our Changing Planet* produced under the plan.

A BROADER AUDIENCE

While *Our Changing Planet* is mandated as a report to Congress, it is also widely used by the scientific community and others who are interested in global environmental change research as a means of tracking CCSP and USGCRP's progress and plans; thus, the



report supports CCSP's communication mission and contributes to informed discussion of climate variability and change by policymakers, resource managers, stakeholders, the media, and the general public. It is also used by the program's international partners and contributes to coordination of scientific activities across national boundaries.

WHO ISSUES OUR CHANGING PLANET?

The report is issued by the CCSP and the Subcommittee on Global Change Research (SGCR), the governing body of the USGCRP.

CCSP

Established in 2002, the CCSP incorporates USGCRP and CCRI. USGCRP was established by the *Global Change Research Act of 1990* to "to assist the Nation and the world to understand, assess, predict, and respond to human-induced and natural processes of global change." CCRI was launched by the President in June 2001, to reduce significant uncertainties in climate science, improve global observing systems, develop science-based information resources to support policymaking and resource management, and communicate findings broadly among the international scientific and user communities.



SGCR

SGCR is one of several subcommittees under the Committee on Environment and Natural Resources (CENR) of the cabinet-level National Science and Technology Council (NSTC). Under the *Global Change Research Act of 1990*, the annual report is to be submitted to Congress by the Chairman of the Federal Coordinating Council for Science, Engineering, and Technology (FCCST), an entity that was subsumed by the NSTC in 1993. The Assistant to the President for Science and Technology (Director of the Office of Science and Technology Policy) presides over the NSTC on behalf of the President.

WHICH AGENCIES AND OFFICES CONTRIBUTE TO OUR CHANGING PLANET?

Thirteen departments and agencies of the U.S. Government participate in CCSP and therefore contribute to *Our Changing Planet*:

- Department of Agriculture (USDA)
- Department of Commerce / National Oceanic and Atmospheric Administration (DOC/NOAA)
- Department of Defense (DOD)
- Department of Energy (DOE)
- Department of Health and Human Services (HHS)
- Department of the Interior / U.S. Geological Survey (DOI/USGS)
- Department of State (DOS)
- Department of Transportation (DOT)
- Agency for International Development (USAID)
- Environmental Protection Agency (EPA)
- National Aeronautics and Space Administration (NASA)
- National Science Foundation (NSF)
- Smithsonian Institution (SI).

In addition, the Executive Office of the President and other related programs have designated liaisons who participate on the CCSP Interagency Committee:

- Office of Science and Technology Policy (OSTP)
- Council on Environmental Quality (CEQ)
- Office of Management and Budget (OMB)
- Climate Change Technology Program (CCTP)
- Office of the Federal Coordinator for Meteorology (OFCM)
- National Institute of Standards and Technology (NIST).

Approval from all of the participating departments/agencies and the liaisons from the Executive Office of the President is required before *Our Changing Planet* can be published and distributed.

WHO TRANSMITS OUR CHANGING PLANET TO CONGRESS?

Our Changing Planet presently is transmitted to the Congress by the Chair and Vice Chair of the interagency Committee on Climate Change Science and Technology (the Secretary of Commerce and the Secretary of Energy) and by the Executive Director of that committee (the Director of the Office of Science and Technology Policy). The committee oversees the interagency CCSP and its counterpart, the Climate Change Technology Program (CCTP).

AVAILABILITY OF CCSP DOCUMENTS

The online version of the FY 2006 edition of *Our Changing Planet* is available at:

[<www.usgcrp.gov/usgcrp/Library/ocp2006/>](http://www.usgcrp.gov/usgcrp/Library/ocp2006/).

Archived online versions of *Our Changing Planet*, from FY 1996 to the present, are available at:

[<www.usgcrp.gov/usgcrp/about/default.htm#OCP>](http://www.usgcrp.gov/usgcrp/about/default.htm#OCP).

The online version of *The Strategic Plan for The U.S. Climate Change Science Program* is available at:

[<www.climatechange.gov/Library/stratplan2003/final/>](http://www.climatechange.gov/Library/stratplan2003/final/).

The CCSP *Strategic Plan*, the current *Our Changing Planet*, and some past editions of *Our Changing Planet* (as well as other materials) are available in hardcopy and/or CD free from the online catalog of the Global Change Research Information Office (GCRIO) at:

[<www.gcric.org/orders/>](http://www.gcric.org/orders/).

FUNDING FOR GLOBAL CHANGE RESEARCH

UNDER THE CCSP AND USGCRP
FISCAL YEARS 1989–2006

Past, present, and future budget data are key components of the information transmitted to Congress in *Our Changing Planet*. This table shows the evolution of funding for the program since 1989. Note that the scope of activities included within the budget is not constant over the period. In some cases (as in 1989-1990), a substantial portion of the year-to-year budget change results from shifting activities into or out of the program. These changes in program definition are the result of changing scientific priorities and other factors.

Fiscal Year	Actual (\$M)	Constant 2005 (\$M)
1989	134	209
1990	659	975
1991	954	1,355
1992	1,110	1,531
1993	1,326	1,775
1994	1,444	1,885
1995	1,760	2,234
1996	1,654	2,039
1997	1,656	1,995
1998	1,677	1,989
1999	1,657	1,925
2000	1,687	1,896
2001	1,728	1,886
2002	1,667	1,792
2003	1,766	1,857
2004	1,977	2,023
2005 Estimate	1,915	1,915
2006 Request	1,891	1,852

Source: *Our Changing Planet*, 1989-2005 editions.

This fact sheet was generated by the Climate Change Science Program Office in collaboration with an interagency working group composed of representatives of the 13 Federal agencies participating in the U.S. Climate Change Science Program.

For further information, see [<www.climatechange.gov>](http://www.climatechange.gov).